

We claim:

1 1. Method of monitoring a fluid pressure of a tire with a sensor, disposed in conduit
2 assemblies for conducting fluid to or from the tire, of a tire pressure management system
3 comprising:
4 providing a pulse of compressed fluid to the conduit assemblies, unless a counter exceeds
5 a count, the fluid in the conduit assemblies thereafter having a conduit pressure;
6 wherein the pulse has a duration that corresponds to a ratio defined by a first
7 predetermined amount divided by a second predetermined amount.

1 2. Method of claim 1, wherein the first predetermined amount corresponds to a pressure
2 shortfall with respect to the target pressure in the conduit assemblies.

1 3. Method of claim 1, wherein the first predetermined amount corresponds to a target
2 pressure less the conduit pressure prior to said providing.

1 4. Method of claim 1, wherein the second predetermined amount corresponds to a
2 pressure increase realized from the a pulse of compressed fluid introduced into the conduit
3 assemblies prior to said providing.

1 5. Method of claim 1, wherein the second predetermined amount corresponds to the
2 conduit pressure prior to said providing less a pressure increase realized from a pulse of
3 compressed fluid introduced to the conduit assemblies prior to said providing.

1 6. Method of claim 1, wherein the duration corresponds to a duration of a pulse of
2 compressed fluid introduced to the conduit assemblies prior to said providing.

1 7. Method of claim 1, further comprising repeating said providing until the conduit
2 pressure equals or exceeds the target pressure.

1 8. Method of claim 1, further comprising repeating said providing until the conduit
2 assemblies and the tire are in fluid communication or equilibrium.

1 9. Method of claim 1, wherein said providing increases fluid pressure in the tire or is
2 sufficient to initiate fluid communication among, via a valve interposed between, the conduit
3 assemblies and the tire.

1 10. Method of claim 1, further comprising determining whether the difference between
2 the conduit pressure and the pressure of the fluid in the conduit following a stabilization period
3 exceeds a limit.

1 11. Method of claim 10, wherein the stabilization period is sufficient to ascertain
2 whether a leak exists in the conduit assemblies.

1 12. Method of claim 10, further comprising logging a leak fault if the difference exceeds
2 the limit.

1 13. Method of claim 10, further comprising defining the current tire pressure as equal to
2 the conduit pressure if the difference does not exceed the limit.

1 14. Method of claim 1, wherein the counter registers each occurrence of said providing.

1 15. Method of claim 1, further comprising clearing the counter when the conduit pressure
2 equals or exceeds the predetermined amount.